ABSTRACT

Methods and apparatuses for calculating an optimal revenue total yield for both sleeping and function space in a hospitality establishment for a set of demand that includes both group and transient demands. In a preferred embodiment of the invention, the revenue optimization problem is characterized as a mixed-integer linear programming (MILP) problem and solved using MILP techniques. Preferably, a small value is assigned to the "cost" of a room upgrade and the cost of room upgrades are included in the revenue function to be optimized. In some embodiments of the invention, the actual revenue yield is compared to the optimum revenue yield.